

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004698**Date Inspected:** 17-Nov-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower & OBG**Summary of Items Observed:**

The Caltrans (CT) Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

OBG Sub-Assembly Bay 1:

The QA Inspector randomly observed 2 Magnetic Drill Operators drilling bolt holes in U-Ribs U-51, U-52, U-53 and U-54 prior to forming.

OBG Bay 2:

The QA Inspector randomly observed 2 Magnetic Drill Operators drilling bolt holes in Longitudinal Stiffeners A571 (E) and 1 drilling bolt holes in Longitudinal Stiffeners A572 (E).

OBG Sub-Assembly Bay 3:

The QA Inspector randomly observed ZPMC welder Wang Hong Bo ID 203206 and Jia Anquan ID 201725, utilizing the Shielded Metal Arc Welding (SMAW) Process in the 2F Position with ZPMC WPS WPS-B-P-2112, to fit up and tack weld T-Ribs to Bottom Plate BP040-001 at Weld Joint (WJ) Numbers 007/008//043/046 and 013/014//049/050. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

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The QA Inspector randomly observed ZPMC welders Gu Cai Hong ID 046830 , utilizing the Submerged Arc Welding (SAW) Process in the 1G Position with ZPMC WPS WPS-B-T-2221-B-L2c-S-2, to weld the butt splice between Edge Plate Sections EP096A/PL1198A and EP096A/PL1198B at WJ EP096-001-001. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 585 amps, 30 volts with a travel speed of 490 millimeters (mm) per minute. The weld parameters appeared to comply with contract requirements.

OBG Bay 4:

The QA Inspector randomly observed ZPMC Non-Destructive Testing (NDT) Technician Bo Tin Rui, utilizing the Magnetic Particle Testing (MT) Method to perform a final MT examination of the cover pass of the fillet welds on Side Plate Sub-Assemblies SP445A/Yellow Tag 001653 WJ's 001 through 010, SP446A/Yellow Tag 001655 WJ's 001 through 010, SP457A/Yellow Tag 001656 WJ's 001 through 010 and SP621A/Yellow Tag 001654 WJ's 025 through 026 and 055 through 066. There appeared to be no indications and ZPMC QC accepted all welds on the above listed Side Plates.

The QA Inspector performed a 10% final Visual (VT) and MT verification on the cover pass of the fillet welds on Side Plate Sub-Assemblies SP445A/Yellow Tag 001653 - SP445-001 WJ's 001 through 010(Green Tag 001746), SP446A/Yellow Tag 001655 WJ's 001 through 010(Green Tag 001749), SP457A/Yellow Tag 001656 WJ's 001 through 010(Green Tag 001749) and SP621A/Yellow Tag 001654 WJ's 025 through 036 and 055 through 066 (Green Tag 001749). There appeared to be no indications the QA Inspector accepted all welds on the above listed Side Plates. The attached photographs provide additional detail.



Summary of Conversations:

As noted in the above body of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, 13764710411, who represents the Office of Structural Materials for your project.

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Inspected By:	Franco,Charlie	Quality Assurance Inspector
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Reviewed By:	Wright,Mark	QA Reviewer
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